number of consumed units which are identified in each request for consumption of at least one service unit until the number of consumed service units equals the number of granted service units.

Prior to the invention, as described in the specification under the "Description of the Prior Art", a problem existed when a user wished to obtain service from a packet data network while remaining anonymous or where there was no roaming agreement permitting the user to be billed while roaming from the user's home network to the second network and through which the user is connected to the packet data network. This situation required alternative billing arrangements to which the invention is addressed. See the first full paragraph on page 2 of the specification.

The independent claims define a method and system which includes a user request from a first network regarding authorized connection to a packet data network through a second network. All of the independent claims define an interaction from a user through a first network to a second network including payment thereof to obtain use of the packet data network. Moreover, independent claims 22 and 24 further recite transmitting to the second network at least one request for consumption of at least one service unit and the second network debits from a stored value of service units which are granted to the user a consumed number of service units. This subject matter is also not suggested by the prior art.

In this regard, claim 1 recites "a method of obtaining connection to a packet data network inputting a user request to a first network which requests the user be authorized for connection to the packet data network through a second network; transmitting from the first network to the second network the user request and an authorization of payment to the second network by the first network for the use by the user of the packet data network; transmitting the second network to the first network authentication information granting the user authentication to obtain connection through the second network to the packet data network; and transmitting the authentication information from the first network to the user which informs the user that the authentication to

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obtain connection to the packet data network has been obtained (emphasis added).

In this regard, claim 21 recites system comprising: a user; a first network which is connectable to the user; a second network which is connectable to the first network and to the user; and a packet data network which is connectable to the second network; and wherein the first network, in response to a user request to the first network that the user be authorized for connection to the packet data network through the second network, transmits to the second network the user request and an authorization of payment by the first network for the use by the user of the packet data network, the second network transmits to the first network authentication information granting the user authentication to obtain connection through the second network to the packet data network, and the first network transmits to the user authentication information which informs the user that authentication to obtain connection to the packet data network has been obtained (emphasis added).

In this regard claim 22 recites a method of obtaining connection to a packet data network comprising: inputting a user request to a first network which requests that the user be authorized for connection to the packet data network through a second network; transmitting from the first network to the second network the user request and an authorization of payment to the second network by the first network for the use by the user of the packet data network; transmitting from the second network to the first network authentication information granting the user authentication to obtain connection through the second network to the packet data network; transmitting the authentication information from the first network to the user which informs the user that authentication to obtain connection to the packet data network has been obtained; and after the user is informed that authentication to obtain connection to the packet data network has been obtained, the user transmits to the second network at least one request for consumption of at least one service unit and the second network debits from a stored value of service units which are granted to the user a consumed number of service units (emphasis added).

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In this regard, claim 24 recites a system comprising: a user;

a first network which is connectable to the user; a second network which is connectable to the first network and to the user; and a packet data network which is connectable to the second network; and wherein the first network, in response to a user request to the first network that the user be authorized for connection to the packet data network through the second network, transmits to the second network the user request and an authorization of payment by the first network for the use by the user of the packet data network, the second network transmits to the first network authentication information granting the user authentication to obtain connection through the second network to the packet data network, and the first network transmits to the user authentication information which informs the user that authentication to obtain connection to the packet data network has been obtained; and after the user is informed that authentication to obtain connection to the packet data network has been obtained, the user transmits to the second network at least one request for consumption of at least one service unit and the second network debits from a stored value of service units which are granted to the user a consumed number of service units (emphasis added).

Claims 1, 13, 21 and 22-25 stand rejected under 35 USC § 103 as being unpatentable over U.S. Patent No. 6,167,513 (Inoue *et al.*) in view of U.S. Patent No. 6,173,407 (Yoon *et al.*) and U.S. Patent No. 5,724,424 (Gifford) as set forth in Section 3 which spans pages 3-9 of the Office Action. Essentially, the Examiner has repeated the previous grounds of rejection and has added Gifford as a further reference. However, Gifford does not cure the deficiencies of Inoue *et* al. and Yoon *et* al. noted in the amendment in response to the previous Office Action. The grounds of rejection are traversed for the following reasons.

Gifford is described by the Examiner in the following manner:

"Gifford also discloses in [sic] an authorization of payment. See the abstract, fig 6, items 26-29, fig 16. He also discloses in the transmitting from

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the first network to the second network the user request and authorization of payment to second network by the first network for the use by the user of the packet data network. See col 12, lines 23-50, col 13, lines 46-67." However, as is discussed below, the places in Gifford on which the Examiner relies do not suggest that Gifford discloses payment to the second network for use of the packet data network. Instead, what is discussed is connection of the first network to the second network by the "public packet switched communication network." No payment is involved for use of the "public packet switched communication" from a user in the first network to a second network through which access to the packet data network is obtained.

As noted above, each of the independent claims requires that at a minimum the user of the first network make payment to the second network for use by the user of the packet data network. This combination is not suggested by the combination of references.

Inoue *et al.* disclose a methodology of providing a mobile computer the ability to obtain cipher communications while moving through interconnected networks, such as the network illustrated in Fig. 3. The methodology pertains solely to the problem of mobility (not payment to which the claims are addressed) in which communications are transmitted between networks through gateways utilizing entities in the home network, such as the home agent, illustrated in Fig. 3. Claim 1 recites "inputting a future request to a first network which requests that the network be authorized for connection to the packet data network through a second network; transmitting from the first network to the second network the user request and the authorization of payment to the second network by the first network for the use by the user of the packet data network; transmitting from the second network to the first network authentication information granting the user authentication to obtain connection through the second network to the packet data network" and claim 21 recites "the first network, in response to a user request to the first network that the user be authorized for connection to the packet data network through the second network, transmits to the second network the user request and an authorization of payment by the first network for the use by the user of

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the packet data network, the second network transmits to the first network
authentication information granting the user authentication to obtain
connection through the second network to the packet data network, and the
first network transmits to the user authentication information which informs the
user that authentication to obtain connection to the packet data network has
been obtained". Clearly, as the Examiner has recognized, Inoue et al do not
pertain closely to the subject matter of independent claims 1 and 21 which, as
highlighted above, is addressed to payment. At most, Inoue et al disclose a
network topology which has some similarity to that of the claimed invention
but not to payment in the network topology. Furthermore, the same difference
exists between Inoue *et al.* and claims 22 and 24.

The citation of Yoon *et al.* does not cure the deficiencies noted above
with regard to Inoue *et al.* Yoon *et al.* disclose a method of authenticating and
charging a client using a web info shop service system to authenticate the
client and further perform charging tasks. See column 2, lines 1-9. Yoon et al
provide access to the charged content provider 206 via the Internet to a client
computer 201. The web info shop 205 authenticates the client and performs
charging tasks. The client computer 201, web info shop 205 and charged
content provider 206 are not counterparts to that of the present invention
involving first, second and packet data networks.

The Examiner states that Yoon *et al* . disclose an authorization of
payment. This is correct but the authorization of payment is not sufficiently
relevant to the subject matter of claims 1, 21, 22 and 24 as quoted above
regarding payments involving transmitting from the first network to the second
network the user request and an authorization of payment to the second
network by the first network for the use of the packet data network through the
second network by the user to motivate a person of ordinary skill in the art to
arrive at the claimed subject matter. The web info shop 205 is not analogous
to the transmitting from a first network to the second network the user request
and an authorization of payment to the second network by the first network for
the use by the user of the packet data network as recited in claims 1, 21, 22
and 24. At most, Yoon et al disclose a mechanism for providing payment by

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an entity in a network other than the charged content provider 206 and would not motivate a person of ordinary skill in the art to arrive at the subject matter of dependent claims 1, 21, 22 and 24.

The Examiner states that Gifford discloses an authorization of payment with a transmission from the first network to the second network. However, the Examiner erroneously concludes that it is authorization of payment to the second network by the first network for the use of the packet data network through the second network as claimed. However, column 12, lines 23-50 and column 13, lines 46-67 upon which the Examiner relies, claims transmission of an authorization message over the public packet switched communication network which is not the same as payment to the second network for the use of the packet data network through the second network by a user connected to the first network. It is therefore seen that the Examiner has misconstrued the independent claims as set forth above regarding the obtaining of a connection to a packet data network through the second network which involves payment to the second network by the first network for the use by the user of the packet data network. The authorization of payment through a "public packet switched communication network" as recited in the noted portions of Gifford's claims is fundamentally different than the claimed payment to the second network for connection through the second network by the user of the first network using the packet data network.

It is submitted that the Examiner's combination of Inoue *et al.*, Yoon *et al.* and Gifford does not supply the aforementioned methodology. Moreover, this combination is clearly based upon hindsight. The teaching of Gifford does not suggest the payment through a second network from a first network which contains a user for the use by the user through the second network of a packet network. Instead, Gifford merely teaches an authorization of payment transmitted between a first and second network without consideration of payment for use of the packet data network as recited in the claims. Accordingly, there is no basis why a person of ordinary skill in the art would be motivated to combine Inoue *et al.*, Yoon *et al.* and Gifford to arrive at the subject matter of claims 1, 13, 21 and 22-25.

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Claims 2-3, 7-8, 14 and 15 stand rejected as being obvious over Inoue *et al.*, Yoon *et al.* and Gifford further in view of U.S. Patent No. 5,659,541 (Chan). The citation of Chan as disclosing a quantification of connectivity does not cure the deficiencies noted above with regard to the combination of Inoue *et al.*, Yoon *et al.* and Gifford.

Claims 4, 9 and 16 stand rejected under 35 USC § 103 as being unpatentable over Inoue *et al.*, Yoon *et al.*, Gifford and Chan further in view of Mouly *et al.* The citation of Mouly *et al.* as disclosing each service unit being encoded with a different random number does not cure the deficiencies noted above with respect to the rejection of the previous claims.

Claims 11 and 12 stand rejected under 35 USC § 103 as being unpatentable over Inoue *et al.*, in view of Yoon *et al.*, Gifford and Chan, and further in view of Mouly *et al.* Again, Mouly *et al.* does not cure the deficiencies noted above.

Claim 18 stands rejected under 35 USC § 103 as being unpatentable over Inoue *et al.*, Yoon *et al.*, Gifford, Chan and U.S. Patent No. 5,345,506 (Tsubakiyama *et al.*). The citation of Tsubakiyama *et al.* as disclosing the termination if a match exists and if the match exists permitting data packets to pass through networks does not cure the deficiencies noted above with respect to the prior art.

In summary, the Examiner has improperly relied upon the newly-cited Gifford reference for allegedly rendering obvious the combination of a user in a first network requesting payment by a second network for use by the user of a packet switch network. This combination is not suggested by the new citation of Gifford for the reasons set forth above. The only basis for making such combination is by impermissible hindsight.
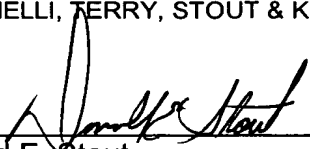
The dependent claims define further features of the present invention which are neither anticipated nor rendered obvious by the references of record.

In view of the foregoing remarks, it is submitted that each of the claims in the application is in condition for allowance. Accordingly, early allowance thereof is respectfully requested.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Deposit Account No. 01-2135 (Case No. **017.3706X00**) and please credit any excess fees to such Deposit Account.

Respectfully submitted,

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